

November 28, 2006

Vice Admiral Thomas J. Barrett  
Administrator  
Pipeline and Hazardous Materials  
Safety Administration  
Washington, D.C. 20590

Dear Admiral Barrett:

Thank you for your August 7, 2006, response to the National Transportation Safety Board regarding Safety Recommendation P-02-1, stated below. This recommendation was made to the Pipeline and Hazardous Materials Safety Administration (PHMSA) as a result of the Safety Board's accident investigation of the pipeline rupture and release of fuel oil near Chalk Point, Maryland, on April 7, 2000.

P-02-1

Establish quantitative criteria, based on engineering evaluations, for determining whether a wrinkle may be allowed to remain in a pipeline.

The Safety Board notes that PHMSA has conducted two studies, has developed and issued an information sheet to inspectors, and conducts ongoing research on wrinkle bends. The 2002 contracted study on the effects of corrosion metal loss on wrinkles and buckles in steel pipelines focused on the ability of in-line inspection to detect corrosion-related defects within a deformed pipe section and evaluated the development of criteria for evaluating wrinkles and buckles with general metal loss due to corrosion. PHMSA distributed the resultant report, *Pipe Wrinkle Study*, to its inspectors in October 2004.

In addition, PHMSA worked with the American Society of Mechanical Engineers (ASME) to develop criteria for the evaluation of wrinkle bends. ASME completed the criteria, and PHMSA placed a summary of it on its Web site for use by all operators. The Safety Board understands that this information will be incorporated in the next edition of ASME B31.4 standard, *Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids*. Further, to ensure PHMSA inspectors are aware of the threats posed by wrinkle bends and to integrate this knowledge into their investigative protocols, PHMSA issued an inspector information sheet in February 2006, which includes the definition of wrinkle, the background and history of wrinkle bends, and the inspection criteria. The Board notes that PHMSA will continue research in an effort to learn more about the cause of wrinkle bends and the threat they pose to pipelines.

Because PHMSA has taken action as requested, Safety Recommendation P-02-1 is classified "Closed—Acceptable Action."

Thank you for your commitment to pipeline safety.

Sincerely,

Original Signed By:

Mark V. Rosenker  
Chairman

cc: Ms. Linda Lawson, Director  
Office of Safety, Energy, and Environment  
Office of Transportation Policy